

Table 2-1. Mitigation Measures By Resource Area

Resource Area	Mitigation Measures
Vegetation	<ul style="list-style-type: none"> The NPS would require the construction contractor to powerwash all construction vehicles and equipment prior to their initial arrival at the Park to remove seed and plant material in an effort to avoid the introduction of any invasive exotic vegetation.
Soils & Water Resources	<ul style="list-style-type: none"> The NPS would develop a Stormwater Management Plan and Soil Erosion and Sediment Control Plan to control overland flow and reduce the potential for sedimentation from the project site as outlined in Connecticut's <i>Guidelines for Soil and Erosion Control</i> (2002) and the <i>Connecticut Soil Erosion and Sediment Control Act</i>, Sections 22a- 325 to 22a-329. Two permanent sediment retention basins would be installed prior in any ground disturbance to minimize any sediment transport. Construction equipment would be staged in the central courtyard area, which would be paved near the end of the construction phase, to minimize soil compaction. Construction would not be conducted when soils are saturated, such as during or immediately following rain events.
Noise	<ul style="list-style-type: none"> Prior to blasting operations, the NPS would notify all surrounding residents so that they are aware of this potential noise source. In accordance with the Town of Ridgefield's Noise Control Ordinance, construction activities would only occur between 7 a.m. and 6 p.m. from Monday through Friday, and between 9 a.m. and 5 p.m. on Saturday (no construction on Sundays). In addition, any drilling or blasting would be permitted only between 8 a.m. and 5 p.m. Monday through Friday.
Visual Resources	<ul style="list-style-type: none"> Vegetative screening would be provided between the new maintenance/curatorial facility and surrounding residences to minimize the visual intrusion of contemporary development. The NPS would comply with the Town of Ridgefield's Code Article VI, <i>Scenic Roads</i>.
Transportation	<ul style="list-style-type: none"> All required signage per the <i>Manual on Uniform Traffic Control Devices</i> would be installed and maintained around the construction site and along Old Branchville Road during construction to notify travelers of the work zone. The NPS would minimize traffic disturbances during peak travel times (7 a.m. to 10 a.m. and 3 p.m. to 6 p.m.).
Human Health & Safety	<ul style="list-style-type: none"> The NPS would require the construction contractor to adhere to the requirements outlined in DO #65, <i>Explosive Use and Blasting Safety</i>, and the <i>NPS Handbook for the Storage, Transportation, and Use of Explosives</i> to protect public safety during blasting operations. The NPS would notify all adjacent residents prior to blasting operations. The NPS would require the construction contractor to follow NPS construction contract standards during construction.
Utilities	<ul style="list-style-type: none"> The design and installation of all new facilities would adhere to current Health Code requirements. All ground disturbance would be cross-checked against local utility maps prior to commencement of construction. Should damage to an existing line occur, the NPS would require that construction in the area be stopped, and the existing line immediately repaired prior to continuing construction activities.
Land Use/ Zoning	<ul style="list-style-type: none"> All exterior lighting on the proposed new maintenance/curatorial facility would be designed to point toward the ground in accordance with the Town of Ridgefield's Office of Planning and Zoning requirements.

2.4 Sustainability

The NPS has adopted the concept of sustainable design as a guiding principle of facility planning and development. The objectives of sustainability are to design NPS facilities to:

- Minimize adverse effects on natural and cultural values;
- Reflect the environmental setting of natural and cultural values;
- Maintain and encourage biodiversity;
- Construct and retrofit facilities using energy-efficient materials and building techniques;
- Operate and maintain facilities to promote their sustainability; and
- Illustrate and promote conservation principles and practices through sustainable design and ecologically sensitive use.

Essentially, sustainability is living within the environment with the least impact on the environment. The Preferred Alternative subscribes to and supports the practice of sustainable planning, design, and construction methods. The Value Analysis Team used the Leadership in Energy and Environmental Design (LEED) Green Building Rating System to produce a target scorecard to determine the level of LEED Certification attainable for the proposed new maintenance and curatorial facility. Using the scorecard, the Team analyzed the project's water efficiency, energy consumption, site sustainability, materials and resources, indoor environmental quality, and innovation and design. It was determined that the project could attain a "LEED certified" classification by the U.S. Green Building Council.

The preferred alternative would incorporate the following sustainable practices:

- Locate and orient building to minimize site disturbance;
- Use local/regional materials;
- Provide on-site septic systems and on-site management of organics via composting;
- Utilize energy conservation features, including natural daylighting and use of photovoltaics and state-of-the-art mechanical and electrical control systems;
- Encourage natural succession, indigenous plants, no permanent irrigation system; and
- Conserve water through use of two-stage restrooms and waterless urinals.

2.5 The Environmentally Preferred Alternative

As stated in Section 2.7 (D) of the NPS DO-12 Handbook, "The environmentally preferred alternative is the alternative that will best promote the national environmental policy expressed in NEPA (Section 101(b))."

National Environmental Policy Act (NEPA) Sec 101 Goal Statements

1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
2. Assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings;
3. Attain the widest range of beneficial uses of the environment without degradation, risk to health and safety, or other undesirable and unintended consequences;
4. Preserve important historic, cultural, and natural aspects of our national heritage, and maintain wherever possible, an environment which supports diversity and variety of individual choice;
5. Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and
6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

(NEPA, 42 USC 4321-4347)

In sum, the environmentally-preferred alternative is the alternative that, not only results in the least damage to the biological and physical environment, but also that best protects, preserves, and enhances historic, cultural, and natural resources.

The approach for incorporating these national goal statements into the determination of the environmentally preferable alternative used a qualitative comparison rating of the alternatives under consideration. Each alternative assessed in this EA/Assessment of Effect was rated as to how well it contributes to meeting each of the six NEPA goals. Given the very general nature of the goal statements, with no specific measurable parameters identified, precise, quantitative ratings are not feasible. Therefore, five general qualitative levels were established to rate alternatives as to how well they contribute to meeting each goal: 1) the alternative contributes substantially to meeting that goal (denoted by two check marks); 2) the alternative contributes somewhat to meeting that goal (denoted by a check mark); 3) the alternative does not contribute to meeting that goal (denoted by a circle); 4) the alternative somewhat interferes with that goal achievement (denoted by an "X"); and 5) the alternative substantially interferes with that goal achievement (denoted by "XX"). Each rating was judgmentally based on an alternative's predicted impacts on the relevant environmental resources. For example, an alternative that adversely affects historic, cultural, and natural resources would get a low rating in regard to NEPA goal #4.

A summary of this process for each alternative is presented in Table 2-2. Below the table, a discussion is provided for each alternative explaining the basis for each of the ratings given to that alternative. Identification of the environmentally preferred alternative involved comparing the entire set of ratings for each alternative. In the absence of any indication of Congressional intent otherwise, each of the six NEPA goal statements was considered equally important.

Table 2-2. Selection of the Environmentally-Preferred Alternative		
National Environmental Policy Act Goals	Alternative A (No Action)	Alternative B (Preferred Alternative)
Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.	X	öö
Assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings.	ö	öö
Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences.	ö	öö
Preserve important historic, cultural, and natural aspects of our national heritage, and maintain, whenever possible, an environment that supports diversity, and variety of individual choice.	X	öö
Achieve a balance between population and resource use, which will permit high standards of living and a wide sharing of life's amenities.	O	ö
Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.	O	ö
Legend: Contributes substantially to meeting the goal = öö Contributes somewhat to meeting the goal = ö Does not contribute to meeting the goal = O Interferes somewhat with that goal achievement = X Interferes substantially with that goal achievement = XX		

Alternative A (No Action)

The No Action alternative is not the environmentally preferred alternative because it does not:

- Ensure as safe of an environment for the public or Park employees as the Preferred Alternative due to continued visitor/pedestrian conflicts and continued non-compliance of some Park staff buildings with the ADA and fire safety codes (contributes somewhat to meeting goals #2 and #3);
- Work towards preserving and protecting historic structures within the Historic Core area or allowing for their use in interpretive programs due to their continued use as Park equipment storage areas and associated wear-and-tear on the buildings (interferes somewhat with achieving goal #4);
- Actively aid in the protection of valuable Park museum collections, or ensure their long-term preservation for continued educational or interpretive use (interferes somewhat with achieving goals #1 and #4);
- Improve Park operational inefficiencies or response times to emergency resource or maintenance problems (does not contribute to meeting goals # 5 and #6; interferes somewhat with achieving goal #4);
- Actively work towards increasing diversity of visitor programs and uses at the Park because it does not provide for the future Artists in Residence Program or interpretation at several historic structures currently used as storage (does not contribute to meeting goal # 5; interferes somewhat with achieving goal #4).

Alternative B (Preferred Alternative)

The Preferred Alternative is the environmentally preferred alternative because it:

- Ensures a safer environment for the public and Park employees than the No Action alternative by reducing visitor/pedestrian conflicts and providing ADA- and fire safety code-compliant buildings for Park staff (contributes substantially to meeting goals # 2 and #3);
- Actively works towards preserving and protecting historic structures within the Historic Core area by returning them to their original conditions and uses and allowing for their use in interpretive programs as a result of removing Park maintenance equipment from the structures, thus reducing wear-and-tear on the buildings (contributes substantially to meeting goals # 2 and #4);
- Actively works towards protecting valuable Park museum collections and ensuring their long-term preservation for continued educational and interpretive use (contributes substantially to meeting goals #4 and #1);
- Improves Park operational efficiency, staff communication, and staff response times to emergency resource and maintenance problems (contributes substantially to meeting goal #3; contributes somewhat to meeting goal #5);
- Allows for an increase in the diversity of visitor programs and uses at the Park by providing for the future Artists in Residence Program and interpretation at several historic structures currently used as storage (contributes substantially to meeting goal #4);
- Works to achieve a balance between population and resource use, enhance the quality of renewable resources, and approach the maximum attainable recycling of depletable resources by using sustainable design practices (outlined in Section 2.4 above) in developing efficient operations (contributes somewhat to meeting goals # 5 and #6).

2.6 Alternatives Considered but Dismissed

2.6.1 Off-Site Storage for Weir Farm Collections

One storage alternative was to seek other rental space (other than the wire mill facility) in the Wilton-Ridgefield area to store Weir Farm museum collections. In 2000, with the General Services Administration, the Park did attempt to find such space, but was unsuccessful. To store the collection objects even further away from the park, for example, in fine art storage somewhere, was not practical. Park staff requires the objects to be accessible and moving the collections to and from the Park would be detrimental to the preservation of the items.

2.6.2 Museum Storage at the Westervelt House

The NPS has considered converting the Westervelt House into curatorial storage. Preliminary sketches and plans were made to do so. However, when architects and engineers took a closer look at the building and collections, and reviewed NPS museum storage standards, it became

clear that it would be technically infeasible to retrofit the residential building for proper climate control and weight loading capacity.

2.6.3 Other On-Site Maintenance, Curatorial Storage, and Administrative Facility Configurations

After eliminating off-site alternatives, the NPS formulated several configurations for curatorial storage, maintenance, and administrative functions on-site. One configuration renovated the Westervelt House as administrative facilities and constructed an attached curatorial facility with the maintenance facility near the rear of the site. A second design completely demolished the Westervelt House and called for the construction of separate curatorial, administrative, and maintenance facilities in a cluster on the site. Each design alternative was evaluated and ranked based on Value Analysis factors (see Section 1.5.2). The initial analysis showed that it was not environmentally infeasible to demolish the Westervelt House or to attempt to situate the curatorial facility near the Westervelt House.

2.7 Comparison of Alternatives

Table 2-3 compares and contrasts the alternatives considered in detail in this EA/Assessment of Effect, including the degree to which each alternative accomplishes the purpose or fulfills the need identified in Section 1.1.

Table 2-3. Comparison of the Alternatives and Extent to Which Each Alternative Meets Project Objectives	
Alternative A (No Action)	Alternative B (Preferred Alternative)
The Westervelt House would not be renovated as administrative space and the new maintenance and curatorial facility would not be constructed. Maintenance equipment would continue to be stored in the Weir Farm Historic Core area and in the wire mill several miles from the site. Administrative staff would continue to operate out of the Burlingham House. Resource and maintenance staff would continue to operate out of the wire mill. Museum collections would continue to be stored in scattered, unsuitable conditions in the Historic Core area and in the wire mill.	The Westervelt House would be renovated for administrative offices for use by NPS staff and the Weir Farm Trust, freeing up the Burlingham House for future use in the Artists in Residence Program. A new maintenance/curatorial facility would be constructed that would store maintenance equipment, museum collections, and associated staff. Curatorial storage would comply with DO #24, <i>NPS Museum Collections Management</i> . The proposed maintenance facility would allow the NPS to remove maintenance equipment from the Historic Core where it is stored now. The two buildings would be designed and/or modified to meet the requirements of the ADA and fire safety codes.
Meets Project Objectives? No. Under the No Action alternative, Park operations would continue to be inefficient due to increased travel times, high resource and maintenance emergency response times, and reduced staff communication. Visitor and pedestrian conflicts would continue with continued storage of maintenance equipment	Meets Project Objectives? Yes. Under the Preferred Alternative, Park staff and equipment would be centralized and consolidated in the new maintenance/curatorial facility and the renovated Westervelt House outside the Historic Core area of Weir Farm. Consolidation of these functions and materials would increase efficiency of Park operations by reducing staff travel times, improving staff response to resource

in the Historic Core area. Historic buildings in the core area would continue to store maintenance equipment, which would not allow these buildings to be used for their intended function or for interpretation in visitor programs. Continued wear and tear on these buildings would occur. By not relocating administrative staff out of the Burlingham House, this House could not be used for the Artists in Residence Program, and this objective of the GMP would not be met. Valuable museum collections would continue to be stored in unsuitable conditions under this alternative, which would not ensure their complete protection over the long-term.

and maintenance emergencies, and improving communication between staff. Relocating maintenance equipment outside the Historic Core area would reduce visitor and pedestrian conflicts, as well as reduce wear and tear on historic structures and allow these structures to be used for their intended purposes of interpretation. Relocating administrative staff out of the Burlingham House would free this House up for future use in the Artists in Residence Program, in keeping with a goal outlined in the Park's GMP. The new curatorial facility would be constructed to NPS museum standards, and would allow for the protection and preservation of current and future collections. Preservation of such valuable resources would greatly benefit visitor experience over the long-term by allowing for their continued use in interpretive and educational programs.

2.8 Impact Comparison Matrix

Table 2-4 compares the potential environmental impacts resulting from the No Action and Preferred Alternative (Alternatives A and B, respectively). Potential impacts are grouped according to environmental resource area or component. Chapter 3, *Environmental Analysis*, of this EA/Assessment of Effect contains a detailed discussion of these potential impacts by resource topic.

Table 2-4 Impacts Comparison Table		
Environmental Resource/Component	No Action	Preferred Alternative
Natural Resources	<ul style="list-style-type: none"> Long-term, negligible to minor, adverse impacts to soils due to the continued loss of sediment from runoff Alternative would contribute a relatively small amount to short- and long-term, minor, localized, adverse cumulative effects on soils 	<ul style="list-style-type: none"> Long-term, minor, localized, adverse impacts on soils from grading, vegetation removal, and compaction Long-term, negligible, localized, adverse impacts on soils due to increased impervious surfaces and changes in drainage patterns Negligible to minor adverse impacts on geology from blasting Alternative would contribute a minimal amount to short- and long-term, minor, localized, adverse cumulative effects on soils
Cultural Resources	<ul style="list-style-type: none"> Minor, long-term, adverse impacts on the cultural landscape and historic structures at Weir Farm from continued use of the Historic Core as administrative offices and Park storage 	<ul style="list-style-type: none"> Minor, long-term, beneficial impacts on historic structures and the cultural landscape at Weir Farm by removing culturally insignificant items and reducing wear and tear on the structures, allowing for their improved stabilization and preservation

Table 2-4 Impacts Comparison Table

Environmental Resource/Component	No Action	Preferred Alternative
	<ul style="list-style-type: none"> Minor, long-term, adverse impacts on museum collections No cumulative impacts on museum collections Alternative would not contribute appreciably to total cumulative impacts on the cultural landscape or historic structures 	<ul style="list-style-type: none"> Moderate, long-term, beneficial impacts on the preservation and protection of the Park's museum collections Alternative would contribute a relatively small amount to long-term, major, beneficial cumulative impacts on the Park's cultural landscape and to moderate, long-term, beneficial cumulative impacts on historic structures No cumulative impacts on museum collections
Socioeconomic Resources	<ul style="list-style-type: none"> No direct, indirect, or cumulative impacts on the gateway community, transportation, traffic, noise, or visual quality are anticipated 	<ul style="list-style-type: none"> Short-term, minor to moderate, adverse impacts on the surrounding community and adjacent residences due to construction noise, traffic, and viewshed changes No noticeable long-term impacts to the gateway community Alternative would contribute to moderate, localized, adverse cumulative impacts on the gateway community over the short-term Short-term, localized, negligible, adverse impact on the transportation system and traffic during construction Long-term, localized, negligible to minor, beneficial impact on and traffic Alternative would contribute a relatively small increment to short- and long-term, minor, localized, beneficial and adverse cumulative effects on traffic and the transportation system Short-term, negligible to minor, localized, adverse visual quality impacts and long-term, minor, localized, adverse visual quality impacts in the vicinity of the Westervelt-DiNapoli-Lecher property Long-term, minor, localized, beneficial impact on visual resources from the removal of maintenance equipment from the Historic Core Alternative would contribute a relatively small increment to short- and long-term, moderate, localized, adverse, cumulative visual impacts in the vicinity of the Westervelt-DiNapoli-Lecher property and to long-term, major, localized, beneficial, cumulative visual impacts in the vicinity of the Historic Core Short-term, minor, localized (only affecting residents immediately surrounding the

Table 2-4 Impacts Comparison Table

Environmental Resource/Component	No Action	Preferred Alternative
		<p>construction site), adverse noise impacts during construction</p> <ul style="list-style-type: none"> • Long-term, negligible, localized noise impacts associated with increased vehicular traffic to the new facilities • Alternative would contribute a small, but measurable, amount to short-term, moderate, adverse, localized cumulative noise impacts
Visitor Use and Experience	<ul style="list-style-type: none"> • No direct effects on visitor use and experience, but long-term, minor to moderate, adverse impacts would continue • Alternative would contribute a measurable amount to minor to moderate, adverse cumulative effects over the short-term, and minor, adverse and beneficial cumulative effects over the long-term 	<ul style="list-style-type: none"> • Short-term, negligible, adverse impacts on visitor use and experience from construction activities • Long-term, moderate, beneficial impacts on visitor use and experience due to enhanced preservation and interpretation of historic structures and collections, reduced visitor/pedestrian conflicts, and enabling the Artists in Residence Program at the Park • Alternative would contribute a measurable amount to long-term, moderate, beneficial cumulative effects on visitor use and experience
Park Operations and Maintenance	<ul style="list-style-type: none"> • No direct effects on Park operations • Long-term, moderate, adverse impacts on Park-wide operations would continue due to continued inefficiencies in operations, response times, and staff communications • Long-term, minor, continued adverse impacts on Park maintenance and Park infrastructure/ building compliance due to the NPS' incurrence of any maintenance costs associated with an unoccupied Westervelt House and continued non-compliance of the wire mill with the ADA and fire safety codes • Alternative would contribute a measurable amount to short- and long-term, minor, adverse, cumulative effects on Park operations and building compliance 	<ul style="list-style-type: none"> • No impacts on Park operations during construction • Long-term, moderate beneficial impacts on Park operations from consolidation of Park functions and equipment due to improved access to Park equipment, reduced staff travel times, improved staff emergency response times, and improved staff communication • Long-term, minor to moderate, localized, beneficial impact on building compliance • Alternative would contribute a substantial increment to long-term, moderate, beneficial, and localized cumulative impacts on Park operations and building compliance